



COMMUNICABLE DISEASE QUARTERLY

Volume 1, Issue 3

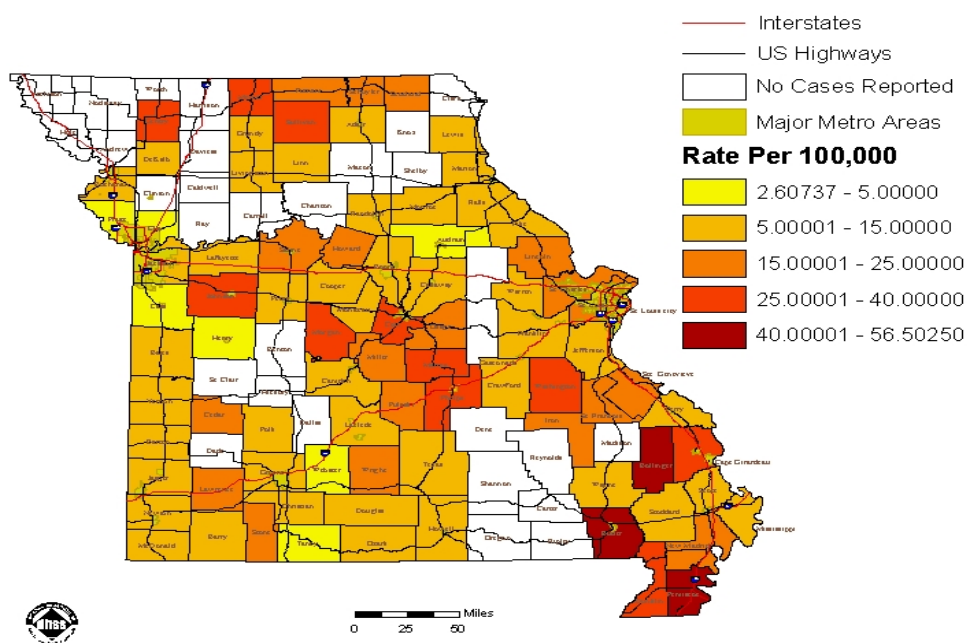
September 2002

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Salmonella counts for 2002 Year-To-Date increased to 652 cases, 32.5% above the five-year median of 492 cases for the time period, partly due to an early outbreak of *Salmonella heidelberg* in the St. Louis area in February. Higher rates for the third quarter are occurring in the southeast part of the state. There has been an increase in *Salmonella typhimurium* and *Salmonella newport* in this part of the state. There is no explanation for this increase at this time.

Salmonella Rates by Missouri County, January - September 2002



Top Ten Salmonella Serotypes 3rd Quarter

Typhimurium	54
Newport	34
Heidelberg	28
Enteritidis	21
Bareilly	13
Java	10
Javiana	9
Norwich	8
Rubislaw	5
Litchfield	4
Saintpaul	4
Thompson	4

Missouri receives alerts about increases in Salmonella infection through the State Public Health Laboratory (SPHL) and the Public Health Laboratory Information System (PHLIS). The Salmonella Outbreak Detection Algorithm (SODA), developed by Biostatistics Information Management Branch (BIMB) and Foodborne And Diarrheal Disease Branch (FDDDB) at the Centers For Disease Control and Prevention, is a statistical algorithm designed to detect unusual clusters of isolates of Salmonella infection. SODA compares current Salmonella isolates reported through PHLIS by serotype to a 5-year historical baseline for that serotype and week to detect unusual increases from the baseline. Analyses can be conducted at state, regional, or national levels. Since 1996, SODA has been implemented at CDC and selected state health departments. If you would like more information on SODA, please call the PHLIS Helpdesk (404) 639-3365. If you like more information on Missouri Enteric Diseases please contact the Division Of Environmental Health and Communicable Disease Prevention Office of Surveillance at 573 751-9071 or <http://www.dhss.state.mo.us/oos/index.html>

Top Ten Salmonella Serotypes, Nationally 2001

Typhimurium	22.1 %
Enteritidis	17.1%
Newport	10.0 %
Heidelberg	5.9%
Javiana	3.4%
Montevideo	2.0%
Oranienburg	1.9 %
Muenchen	1.8 %
Thompson	1.6 %
Saintpaul	1.5 %

THIRD QUARTER COMMUNICABLE DISEASES, MISSOURI

Cryptosporidiosis, Ecoli O157H7 and Salmonella are elevated. Campylobacter, Giardia, Shigellosis and Yersinia enterocolitica are down. Despite a national recall of products contaminated with Listeria, there was no change in the number of cases of Listeria from the five year median for the year to date. Among respiratory illness, Influenza cases peaked in February during the 2001-2002 flu season and Legionellosis is down 37.5%. Viral hepatitis is down across the board despite different transmission modalities for hepatitis A, B and C. Mumps and Pertussis are up. We have four mumps cases and Pertussis continues to increase around the state with an 86% increase of 106 cases over the five year median of 57 cases through the quarter. Tuberculosis is slightly down. Ehrlichiosis, Lyme and Rocky Mountain Spotted Fever are up and Tularemia is down. For more on Zoonotic Diseases see page 3. There has been an increase in the number of travel associated cases of Malaria reported and we are still seeing cases of *Haemophilis influenzae* with type b and other serogroups being more commonly reported in older non-vaccinated populations. Despite a decrease in the number cases of meningococcal disease being reported it continues to be a cause of concern because of outbreaks reported in a Military facility and other settings.

	2002 3Qtr	2002 YTD	2001 YTD	5 Year Median YTD	% Change 5 Year Median	Number of Cases, Third Qtr 2002 Missouri		
						July	Aug	Sep
Enteric Diseases								
Campylobacteriosis	178	436	483	448	-2.68%	69	56	53
Cryptosporidiosis	14	29	33	26	+11.54%	2	7	5
E. coli O157:H7 #	29	50	42	42	+19.05%	12	8	9
Giardiasis	135	359	562	562	-36.12%	42	43	50
Listeria monocytogenes	1	6	6	6	0.00%	0	0	1
Salmonellosis	285	652	463	492	+32.52%	77	96	112
Shigellosis	58	123	249	249	-50.60%	26	22	10
Yersinia enterocolitica	0	9	12	11	-18.18%	0	0	0
Respiratory								
Influenza (Lab Confirmed)	12	4200	1879	1074	+291.06%	1	11	0
Legionellosis	2	10	19	16	-37.50%	1	0	1
Viral Hepatitis								
Hepatitis A	18	70	93	360	-80.56%	6	5	7
Hepatitis B	30	92	87	111	-17.12%	10	6	14
Hepatitis C (Acute)*	1	5	9	10.5	-52.38%	0	0	1
Hepatitis C (Other)*	1137	4261	5158	4625.5	-7.88%	392	428	317
Vaccine Preventable								
Mumps	0	4	0	1	+300.00%	0	0	0
Pertussis	53	106	80	57	+85.96%	16	17	20
Tuberculosis								
Tuberculosis Disease	39	114	101	131	-12.98%	18	12	9
Zoonotic								
Ehrlichiosis	34	54	24	21	+157.14%	12	15	7
Lyme Disease	19	36	22	22	+63.64%	11	4	4
Rocky Mtn Spotted Fever	35	84	58	22	+281.82%	14	12	9
Tularemia	8	14	16	15	-6.67%	5	1	2
Other								
HIB Disease	3	10	13	8	+25.00%	2	0	1
Malaria	6	14	11	11	+27.27%	3	3	0
Meningococcal Disease	6	39	44	66	-40.91%	2	4	0

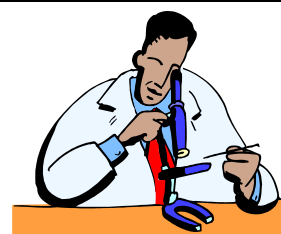
*Hepatitis C became reportable in 1997; it was previously included in Hepatitis Non A, Non B.

Hepatitis C (Other) represents positive tests (HCV EIA, RIBA, or PCR) but did not meet CDC's case definition for acute Hepatitis C.

Reportable diseases of very low incidence (<10 cases in previous year) are not included.

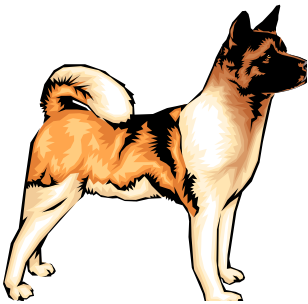
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Antibiotic Resistance: It is a war against an enemy who outnumbers us by the billions, can produce new troops in twenty minutes and can share information across different populations. It is a war we are losing



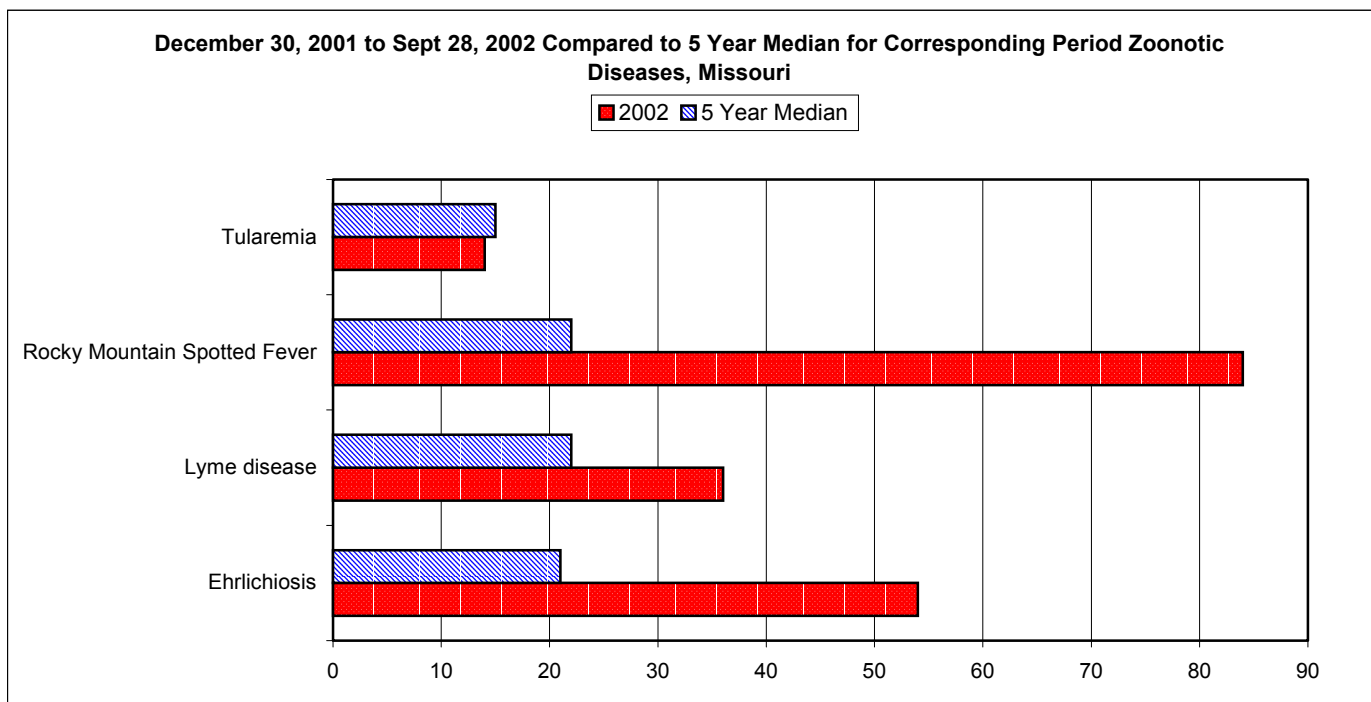
ZOONOTIC DISEASES

While not accounting for as many cases as the enteric diseases, zoonotic disease with the exception of Tularemia also showed a marked increase during the third quarter. This is above the expected seasonal increases. Although we have not completed the year, Rocky Mountain Spotted Fever counts are 35% above last years 62 cases and 219% above the ten-year average of 26.3. The highest previous reported annual number in the last twenty-three years is 54 in 1988. There have been 54 cases of Ehrlichiosis reported through the third quarter 157.1% above the five year median of 21 cases. Proposed changes for Ehrlichiosis during 2003 include the addition by CDC of Ehrlichiosis other to the reporting categories to better differentiate species such as *Ehrlichia ewingi* from species that cause human monocytic ehrlichiosis and human granulocytic ehrlichiosis. Lyme disease is up 63.3% above the 22 cases of the five year median.

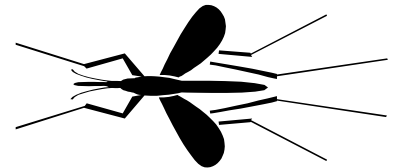


To protect its citizens Missouri collects information about rabies in animals and human beings. A new process will soon provide us with better information on the risk of acquiring rabies, which is still 100% fatal. Animal bites are reportable in Missouri due to a new state statute. Statute 322.140. 1. If a county does not adopt rules and regulations pursuant to sections 322.090 to 322.130, whenever an animal bites or otherwise possibly transmits rabies or any zoonotic disease, the incident shall be immediately reported to the county health department. The county health department shall immediately report the incident to the Department Of Health and Senior Services and shall cooperate fully with the Department Of Health and Senior Services in its investigation.

The fall is hunting season and more Missourians than ever (men, women and children) enjoy the sport of turkey, deer and rabbit hunting. Just remember if you going hunting avoid obviously diseased animals, wear gloves and wash your hands when handling carcasses and don't forget to check for ticks on your body when you finish hunting. Dress warmly and happy hunting.



West Nile: Don't Let It Bug You: coming soon





Missouri Department Of Health And Senior Services

Division Of Environmental Health And Communicable Disease Prevention — Office Of Surveillance

930 Wildwood
PO Box 570
Jefferson City, MO 65102

Phone: 573-751-9071
Fax: 573-751-6417
Email: fobbsm@dhss.state.mo.
us

*Early identification of health
threats maximizes the results of
prevention efforts*

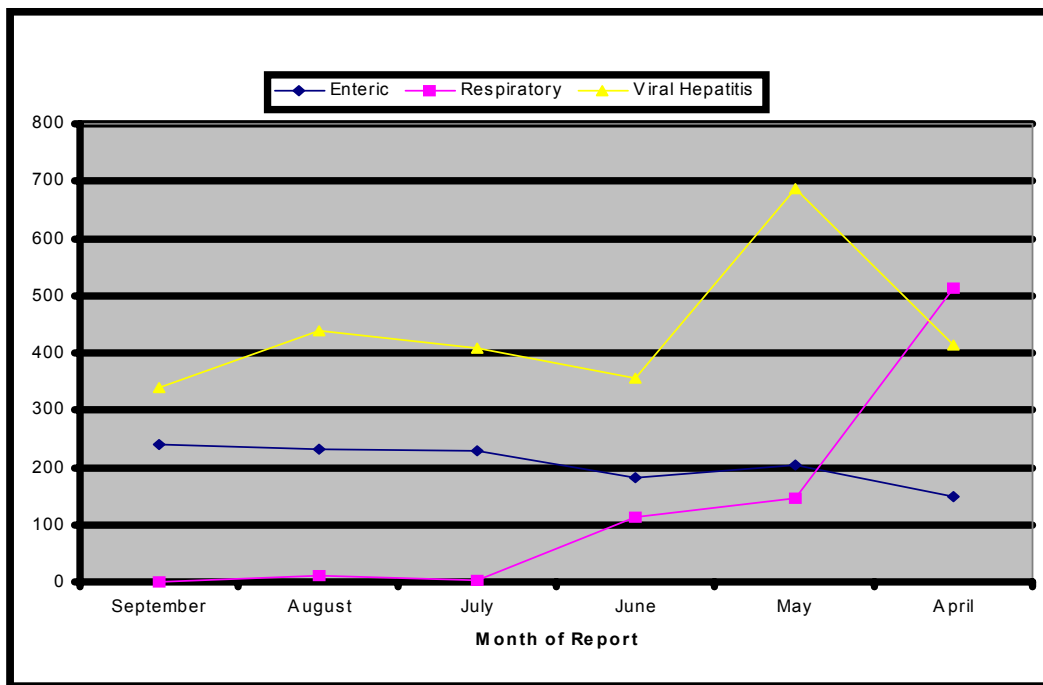
Next Issue:

- *Special Feature: Influenza or not; the fall guide to respiratory diseases*
- *Fourth Quarter Report*
- *Smallpox vaccinations*
- *West Nile Report*
- *Hyperthermia; a reportable condition in Missouri*
- *Six month trends*



High Incidence Disease.

The last three months have shown a slight but steady increase in the number of enteric diseases reported, perhaps associated with temperature control problems in food during the summer months. Hepatitis, mostly due to hepatitis C showed a marked increase in May with a June down turn and gradual increase since then. Influenza peaked in February, so respiratory continues its seasonal falloff during the summer months. The flu season runs October to March.



Low Incidence Disease.

Vaccine preventable disease has been following an upward trend for the past six months. Zoonotic diseases are showing their expected summer increase. Tuberculosis showed an increase in May followed by a slide in the number of cases per month. Other diseases such as Malaria, Haemophilis and Meningococcal have remained fairly stable.

